WHAT IS CLAIMED IS:

1. A moving picture encoding apparatus comprising:

a skip number control section which controls a skip number between frames to be encoded;

a quantization scale control section which controls a quantization scale indicative of a degree of quantization;

an encoding section which performs encoding of a moving picture by selectively using one of an inter-coding type process and an intra-coding type process on the basis of the quantization scale determined by the quantization scale control section and the skip number determined by the skip number control section;

a code amount detection section which finds a code amount of a frame encoded by the encoding section;

a storage section which stores the quantization scale with which the encoding section performs encoding by the inter-coding type process, the code amount found by the code amount detection section at this time, the quantization scale with which the encoding section performs encoding by the intra-coding type process, and the code amount found by the code amount detection section at this time; and

an encoding process setting section which sets the encoding process to be performed by the encoding section to the intra-coding type process, if the skip

number determined by the skip number control section is a predetermined first value or more and the quantization scale and code amount stored in the storage section satisfy a predetermined condition.

2. The moving picture encoding apparatus according to claim 1, wherein the inter-coding type process is at least one of a unidirectional predictive encoding process and a bi-directional predictive encoding process.

3. The moving picture encoding apparatus according to claim 1, wherein the encoding process setting section sets the encoding process to be performed by the encoding section to the intra-coding type process, when the skip number determined by the skip number control section has reached said predetermined first value or more, on the basis of a product of the quantization scale and the code amount of each encoding process stored in the storage section.

4. The moving picture encoding apparatus according to claim 1, wherein the encoding process setting section sets the encoding process to be performed by the encoding section to the intra-coding type process, when the skip number determined by the skip number control section has reached said predetermined first value or more while the encoding section is performing the encoding by the inter-coding type process, and if the ratio of a product of a mean

value of the quantization scale and the code amount of the inter-coding type process stored in the storage section to a product of a mean value of the quantization scale and the code amount of the intra-coding type process stored in the storage section is greater than a predetermined second value.

5. The moving picture encoding apparatus according to claim 4, wherein said second value is a fixed value or a variable value according to the skip number determined by the skip number control section.

6. The moving picture encoding apparatus according to claim 1, further comprising an averaging section which finds a mean value of the quantization scale determined by the quantization scale control section,

wherein the storage section stores the mean value obtained by the averaging section as the quantization scale.

7. A moving picture encoding method comprising:

a skip number control step of controlling a skip number between frames to be encoded;

a quantization scale control step of controlling a quantization scale indicative of a degree of quantization;

an encoding step of performing encoding of a moving picture by selectively using one of an inter-coding type process and an intra-coding type process on

the basis of the quantization scale determined by the quantization scale control step and the skip number determined by the skip number control step;

a code amount detection step of finding a code amount of a frame encoded by the encoding step;

a storage step of storing the quantization scale with which the encoding step executes encoding by the inter-coding type process, the code amount found by the code amount detection step at this time, the quantization scale with which the encoding step executes encoding by the intra-coding type process, and the code amount found by the code amount detection step at this time; and

an encoding process setting step of setting the encoding process to be performed by the encoding step to the intra-coding type process, if the skip number determined by the skip number control step is a predetermined first value or more and the quantization scale and code amount stored in the storage step satisfy a predetermined condition.

8. The moving picture encoding method according to claim 7, wherein the inter-coding type process is at least one of a unidirectional predictive encoding process and a bi-directional predictive encoding process.

9. The moving picture encoding method according to claim 7, wherein the encoding process setting step

sets the encoding process to be performed by the encoding step to the intra-coding type process, when the skip number determined by the skip number control step has reached said predetermined first value or more, on the basis of a product of the quantization scale and the code amount of each encoding process stored in the storage step.

10. The moving picture encoding method according to claim 7, wherein the encoding process setting step sets the encoding process to be performed by the encoding step to the intra-coding type process, when the skip number determined by the skip number control step has reached said predetermined first value or more while the encoding step is executing the encoding by the inter-coding type process, and if the ratio of a product of a mean value of the quantization scale and the code amount of the inter-coding type process stored in the storage step to a product of a mean value of the quantization scale and the code amount of the intra-coding type process stored in the storage step is greater than a predetermined second value.

11. The moving picture encoding method according to claim 10, wherein said second value is a fixed value or a variable value according to the skip number determined by the skip number control step.

12. The moving picture encoding method according to claim 7, further comprising an averaging step which

finds a mean value of the quantization scale determined by the quantization scale control step,

wherein the storage step stores the mean value obtained by the averaging step as the quantization scale.